Application No.: 10/722,987 **Office Action Dated:** July 12, 2007

REMARKS

This is a full and timely response to the non-final Office Action mailed July 12, 2007. Reconsideration and allowance of the application and presently pending claims are respectfully requested.

Present Status of Patent Application

Claims 1-7, 10-19, 22-32, and 34-36 are pending in the present application. Specifically, claims 2-4, 6-7, 10-12, 26-28, 30-32 and 34-36 are original unamended claims; claims 1, 5, 13-19, 22-25, and 29 have been currently amended without introduction of new matter; and claims 8-9, 20-21, and 33 remain canceled. Reconsideration and allowance of the application and presently pending claims are respectfully requested.

A. Claim Rejections under 35 U.S.C. §101

Statement of the Rejection

Claims 13 – 19, and 22 - 24 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Response to the Rejection

Claims 13-19 and 22-24

The first part of the rejection points out that claim 13 is directed to non-statutory subject matter because the claim recites a "computer-readable medium," which is further defined as a "carrier wave" in the specification. The Office action then goes on to assert that a "carrier wave" or a "carrier signal" is not statutory matter.

In response to the Office action assertion, and in the interests of moving forward prosecution in the case by reducing the number of items under dispute, Applicant has opted to currently amend claims 13-19 and 22-24 to specify that the computer readable medium is a computer readable storage medium. Applicant has clarified the nature of this storage medium in his specification, specifically in paragraph [0026] lines 3-5, which states: "By way of example, and not limitation, computer readable media may comprise computer storage media and communication media" (Emphasis added). A few examples of computer storage media (RAM, ROM etc.) and communication media (modulated data signal) are provided in the

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same paragraph.

As a result of the amendment, Applicant respectfully asserts that the term "computer-readable <u>storage</u> medium" addresses and overcomes the Office action remarks cited above.

The second part of the rejection points out that: "When nonfunctional descriptive material is recorded on some computer-readable medium, in a computer or on an electromagnetic carrier signal, it is not statutory since no requisite functionality is present to satisfy the practical application requirement." Applicant respectfully traverses this second part of the rejection because claim 13 is directed to "performing a method for searching data in an electronic device." It is respectfully submitted that configuring and operating such an electronic device constitutes a practical application producing a useful, concrete, and tangible result, thus satisfying the requirements of 35 § U.S.C. 101.

Specifically, in this case, the electronic device is used for "storing" character strings, and "searching" for certain characters in the character string, which actions lead to a useful, concrete, and tangible result ("returning a set of first character strings..."). It may be further relevant to point out that the electronic device is also capable of "receiving an input from an input device," thereby constituting a tangible object that produces a useful, concrete, and tangible result.

In light of the current amendments as well as the remarks above, Applicant respectfully submits that the rejection of claims 13-19 and 22-24 under 35 § U.S.C. 101 has been overcome and hereby requests withdrawal of the rejection, followed by allowance of claims 13-19 and 22-24.

B. Claim Rejections under 35 U.S.C. §103

Statement of the Rejection

Claims 1-7, 10-19, 22-32, and 34-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Green (US Patent App. Pub. No. 2002/0129012 A1, published: September 12, 2002) in view of Beach et al. (Beach hereinafter) (US 2003/0014753 A1).

Response to the Rejection

Claim 1

The Office action admits in page 7 that: "Green does not explicitly disclose that the input device comprises a plurality of keys" and then goes on to allege that "Beach discloses Page 9 of 14

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that: the input device comprises a plurality of keys (Page 1, [0009], lines 5-10, Beach), and each key corresponds to a unique subset of an alphabet (Page 4, [0051], lines 1-3, Beach)."

Applicant's invention generally relates to "string searches using a limited input device" (paragraph [0001] of Applicant's specification). Towards this end, Applicant has shown in his FIG. 2, a keypad containing various keys that share a number and a subset of an alphabet. Applicant describes how such a keypad is operated, for example, in his paragraph [0036], lines 6-8, which states: "A user selects a letter by depressing a key a corresponding number of times. To enter the letter 'b' for example, the user would depress key 2 twice. To select the letter 'c', the user would depress key 2 three times." Applicant further uses his FIG. 3 and other figures to describe how to carry out a data search in the manner cited in Applicant's claim 1.

In contrast, the cited prior art of Beach (Page 1, [0009], lines 5-10, Beach) discloses in pertinent part: "a virtual alphanumeric keypad displayed in a viewer interface by means of a remote control." Such a virtual keyboard 41 is shown in Beach's FIG. 4. Virtual keyboard 41 contains a set of individual virtual keys for each letter of an alphabet and another set of individual virtual keys for each number (0 to 9). The virtual keyboard 41 does not contain any key having a subset of an alphabet. One of ordinary skill in the art will recognize that using such a key is unnecessary and illogical. Specifically, using such a key entails an unnecessary and complicated implementation wherein multiple key activations of a virtual key would have to be detected. Beach does not disclose such a key or such an implementation.

Consequently, Applicant respectfully submits that the Office action allegation that Beach discloses an input device wherein *each key corresponds to a unique subset of an alphabet* is erroneous and improper.

Nonetheless, in an effort to move forward prosecution in the case and reduce the number of items under dispute, Applicant has opted to currently amend claim, which now cites in pertinent part: "a keypad having at least one alphanumeric key associated with a unique number and a unique subset of an alphabet." Such an alphanumeric key not only includes a subset of an alphabet (as claimed previously) but further includes a unique number.

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As is known, a proper rejection under 35 U.S.C. § 103(a) necessitates that the prior art references when combined must teach all the limitations of Applicant's rejected claim. With reference to the current rejection of claim 1 under 35 U.S.C. § 103(a), Applicant respectfully submits that the claim is allowable in its previously submitted form and is now further allowable as a result of the current amendment. Applicant hereby requests withdrawal of the rejection followed by allowance of claim 1.

Claims 2-7 and 10-12

Applicant respectfully submits that independent claim 1 is allowable for at least the reasons cited above. Consequently, claims 2-7 and 10-12 that are dependent directly or indirectly on claim 1 are also allowable as a matter of law. *In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988).

Furthermore, Applicant respectfully traverses the rejection of these claims because the reasons provided in the Office action are improper and inadequate. For example, in rejecting Applicant's claim 5, the Office action alleges: "Green in view of Beach discloses a method, wherein each of the characters in the second set of characters corresponds to an key on the input device (Page 2, [0026], lines 1-10, "and associates each word with a unique identifying number..." (Emphasis added)

Green does indeed state in his (Page 2, [0026], lines 1-10), that: "The lexicon 22 contains words extracted from the collection of documents 14 and associates each word with a unique identifying number." However, Green does not disclose that the unique identifying number corresponds to a key on an input device (as improperly alleged in the Office action). To the contrary, Green's (Page 2, [0026], lines 1-10) goes on to state: "When a search query is executed, word number sets are generated for each term in the query." Clearly, Green does not mention a key of an input device in this regard.

For at least the reasons cited above, Applicant respectfully requests withdrawal of the rejection under 35 U.S.C. § 103(a) followed by allowance of claims 2-7 and 10-12.

Claim 13

In contrast to claim 1 which is a method claim, claim 13 pertains to a computer readable storage medium. Consequently, the scope of claims 1 and 13 are different from one another. However, it can be appreciated that the remarks made above in response to the rejection of method claim 1 are equally applicable to the rejection of claim 13.

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Consequently, Applicant respectfully submits that independent claim 13 is also allowable and hereby requests withdrawal of the rejection under 35 U.S.C. § 103(a), followed by allowance of claim 13.

Claims 14-19 and 22-24

Applicant respectfully submits that independent claim 13 is allowable for at least the reasons cited above. Consequently, claims 14-19 and 22-24 that are dependent directly or indirectly on claim 13 are also allowable as a matter of law. *In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988).

Furthermore, Applicant respectfully traverses the rejection of these claims because the reasons provided in the Office action are improper and inadequate. The rejection of claim 17 mirrors that of claim 5. Consequently, the remarks provided above with reference to claim 5 are equally pertinent to claim 17 as well.

For at least the reasons cited above, Applicant respectfully requests withdrawal of the rejection under 35 U.S.C. § 103(a) followed by allowance of claims 14-19 and 22-24.

Claim 25

In contrast to claim 1 which is a method claim, claim 25 pertains to a data searching system. Consequently, the scope of claims 1 and 25 are different from one another. However, it can be appreciated that the remarks made above in response to the rejection of method claim 1 (vis-à-vis each key corresponding to a unique subset of an alphabet) are equally applicable to the rejection of claim 25.

Consequently, Applicant respectfully submits that independent claim 25 is also allowable and hereby requests withdrawal of the rejection under 35 U.S.C. § 103(a), followed by allowance of claim 25.

Claims 26-32 and 34-36

Applicant respectfully submits that independent claim 25 is allowable for at least the reasons cited above. Consequently, claims 26-32 and 34-36 that are dependent directly or indirectly on claim 25 are also allowable as a matter of law. *In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988). Applicant respectfully requests withdrawal of the rejection under 35 U.S.C. § 103(a) followed by allowance of claims 26-32 and 34-36.

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Prior Art Made of Record

The prior art made of record has been considered, but is not believed to affect the patentability of the presently pending claims.

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CONCLUSION

Applicant respectfully submits that pending claims 1-7, 10-19, 22-32, and 34-36 are allowable. Favorable reconsideration and allowance of the present application and all pending claims are hereby courteously requested. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned representative.

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